I. AMENDMENT

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A dye composition for dyeing keratin fibres, comprising, in a medium that is suitable for dyeing, at least one cationic tertiary para-phenylenediamine comprising a pyrrolidine nucleus that corresponds to formula (I):

$$R_3$$
 R_2
 R_1
 R_1
 R_2
 R_1
 R_2
 R_1
 R_2
 R_1
 R_2
 R_3
 R_2
 R_3
 R_2
 R_3
 R_2
 R_3
 R_3
 R_2
 R_3
 R_3

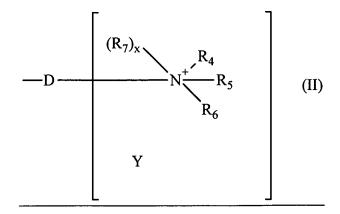
in which

n ranges from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals R₁ may be identical or different,

R₁ represents a chlorine, bromine, or C₁-C₄ alkyl, C₁-C₄ hydroxyalkyl, C₁
C₄ aminoalkyl, C₁-C₄ alkoxy or C₁-C₄ hydroxyalkoxy radical,

R₂ represents:

an onium radical Z corresponding to formula (II)



in which:

D is a single bond or a linear or branched C₁-C₁₄ alkylene

chain which may contain one or more hetero atoms

chosen from oxygen, sulphur and nitrogen, and which

may be substituted with one or more hydroxyl, C₁-C₆

alkoxy or amino radicals, and which may bear one or

more ketone functions;

R₄, R₅ and R₆, taken separately, represent a C₁-C₁₅ alkyl

radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆

polyhydroxyalkyl radical; a (C₁-C₆)alkoxy(C₁-C₆)alkyl

radical; an aryl radical; a benzyl radical; a C₁-C₆

amidoalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl

radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl

radical in which the amine is mono- or disubstituted

with a C₁-C₄ alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; or

R4, R5 and R6 together, in pairs, form, with the nitrogen atom to which they are attached, a saturated 4-, 5-, 6- or 7-membered carbon-based ring optionally containing one or more hetero atoms, the cationic ring possibly being substituted with a halogen atom, a hydroxyl radical, a C1-C6 alkyl radical, a C1-C6 monohydroxyalkyl radical, a C2-C6 polyhydroxyalkyl radical, a C1-C6 alkoxy radical, a tri(C1-C6)alkylsilane(C1-C6)alkyl radical, an amido radical, a carboxyl radical, a (C1-C6)alkylcarbonyl radical, a thio (-SH) radical, a C1-C6 thioalkyl (-R-SH) radical, a (C1-C6)alkylthio radical, an amino radical, an amino radical mono- or disubstituted with a (C1-C6)alkyl, (C1-C6)alkylcarbonyl, amido or (C1-C6)alkylsulphonyl radical;

R₇ represents a C₁-C₆ alkyl radical; a C₁-C₆

monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl

radical; an aryl radical; a benzyl radical; a C₁-C₆

aminoalkyl radical; a C₁-C₆ aminoalkyl radical in

which the amine is mono- or disubstituted with a (C₁
C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or

(C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl

radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ tri
fluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl

radical; a C_1 - C_6 sulphonamidoalkyl radical; a $(C_1$ - C_6)alkylcarboxy $(C_1$ - C_6)alkyl radical; a $(C_1$ - C_6)alkylsulphinyl $(C_1$ - C_6)alkyl radical; a $(C_1$ - C_6)alkylsulphonyl $(C_1$ - C_6)alkyl radical; a $(C_1$ - C_6)alkylcarbonyl $(C_1$ - C_6)alkyl radical; an N- $(C_1$ - C_6)alkylcarbamyl $(C_1$ - C_6)alkyl radical; an N- $(C_1$ - C_6)alkylsulphonamido $(C_1$ - C_6)alkyl radical;

x is 0 or 1,

when x = 0, then the linker arm is attached to the

nitrogen atom bearing the radicals R₄ to R₆,

when x = 1, then two of the radicals R₄ to R₆ form,

together with the nitrogen atom to which they are

attached, a 4-, 5-, 6- or 7-membered saturated ring and

D is linked to a carbon atom of the saturated ring;

Y is a counterion;

a trialkylammonium radical;

onium radical Z corresponding to formula (III)

$$\begin{array}{c|c}
 & (R_{10})_{x} \\
 & (R_{9})_{0} \\
 & (R_{8})_{q} \\
 & Y
\end{array}$$
(III)

in which

D is a single bond or a linear or branched C₁-C₁₄ alkylene

chain that may contain one or more hetero atoms

chosen from oxygen, sulphur and nitrogen, and that

may be substituted with one or more hydroxyl, C₁-C₆

alkoxy or amino radicals, and that may bear one or

more ketone functions;

the ring members E, G, J and L, which may be identical or

different, represent a carbon, oxygen, sulphur or

nitrogen atom to form a pyrrole, pyrazole, imidazole,

triazole, oxazole, isoxazole, thiazole or isothiazole

ring,

q is an integer between 0 and 4 inclusive;
o is an integer between 0 and 3 inclusive;
q+o is an integer between 0 and 4;

- the radicals R₈, which may be identical or different, represent a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a C₁-C₆ alkylcarbonyl radical, a thio radical, a C₁-C₆ thioalkyl radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical; it being understood that the radicals R₈ are borne by a carbon atom,
- the radicals R₉, which may be identical or different, represent

 a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl

 radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁
 C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁
 C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical, a (C₁
 C₆)alkylcarboxy(C₁-C₆)alkyl radical or a benzyl

 radical; it being understood that the radicals R₉ are

 borne by a nitrogen atom,
- R₁₀ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl

radical; an aryl radical; a benzyl radical; a C₁-C₆
aminoalkyl radical, a C₁-C₆ aminoalkyl radical in
which the amine is substituted with a (C₁-C₆)alkyl, (C₁C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl
radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆
carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a
tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆
sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁C₆)alkyl radical; a (C₁-C₆)alkylsulphinyl(C₁-C₆)alkyl
radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a
(C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1

when x = 0, the linker arm D is attached to the nitrogen atom,

when x = 1, the linker arm D is attached to one of the ring members E, G, J or L,

Y is a counterion,

wherein ring members E, G, J and L form an imidazole ring; or

an onium radical Z corresponding to formula (IV)

in which:

D is a single bond or a linear or branched C₁-C₁₄ alkylene

chain which may contain one or more hetero atoms

chosen from an oxygen, sulphur or nitrogen atom, and

which may be substituted with one or more hydroxyl,

C₁-C₆ alkoxy or amino radicals, and which may bear

one or more ketone functions;

the ring members E, G, J, L and M, which may be identical or

different, represent a carbon, oxygen, sulphur or

nitrogen atom and form a ring chosen from pyridine,

pyrimidine, pyrazine, triazine and pyridazine rings;

p is an integer between 0 and 3 inclusive;

m is an integer between 0 and 5 inclusive;

p+m is an integer between 0 and 5;

the radicals R₁₁, which may be identical or different,

represent a halogen atom, a hydroxyl radical, a C₁-C₆

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alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a C₁-C₆ alkylcarbonyl radical, a thio radical, a C₁-C₆ thioalkyl radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical; it being understood that the radicals R₁₁ are borne by a carbon atom,

the radicals R₁₂, which may be identical or different,

represent a C₁-C₆ alkyl radical, a C₁-C₆

monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl

radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a

(C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamyl
alkyl radical, a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl

radical or a benzyl radical; it being understood that the

radicals R₁₂ are borne by a nitrogen atom,

R₁₃ represents a C₁-C₆ alkyl radical; a C₁-C₆ mono
hydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl

radical; an aryl radical; a benzyl radical; a C₁-C₆

aminoalkyl radical; a C₁-C₆ aminoalkyl radical in

which the amine is mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkyl radical; a (C₁-C₆)-alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkyl-sulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkyl-carbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkyl-carbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkyl-sulphonamido(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkyl-sulphonamido(C₁-C₆)alkyl radical;

<u>x is 0 or 1</u>

when x = 0, the linker arm D is attached to the nitrogen atom,

when x = 1, the linker arm D is attached to one of the ring members E, G, J, L or M,

Y is a counterion,

wherein the ring members E, G, J, L and M form with the ring

nitrogen a ring chosen from pyridine and pyrimidine

rings;

R₃ represents a hydrogen atom or a hydroxyl radical; and

at least one polyol which has a molecular weight of between 90 and 350 and corresponds to the formula V :

$$R'_{1} \xrightarrow{\qquad \qquad C \qquad \qquad } \begin{bmatrix} A \end{bmatrix}_{m} \xrightarrow{\qquad \qquad C \qquad \qquad } R'_{4}$$

$$OH \qquad \qquad OH \qquad \qquad (V)$$

in which R'₁, R'₂, R'₃ and R'₄ denote independently of one another a hydrogen atom, a C₁-C₆ alk

yl radical or a C₁-C₆ mono- or polyhydroxyalkyl radical,

A denotes a linear or branched alkylene radical containing from 1 to 18 carbon atoms, this radical containing 0 to 9 oxygen atoms, m denotes 0 or 1,

with the proviso that the total number of carbon atoms present in the radical A and in the entirety of substituents R'₁, R'₂, R'₃ and R'₄ is greater than or equal to 2;

wherein the polyol is further defined as:

a polyol of formula V for which m=0;

a polyethylene glycol; or

a polyol of formula V for which m=1 and R'₁, R'₂, R'₃ and R'₄

denote, independently of one another, a hydrogen atom or a

C₁-C₆ alkyl radical, and whose molecular weight is less than

200.

- 2. (Cancelled).
- 3. (Currently Amended) The composition of claim [[2]] $\underline{1}$, wherein the cationic tertiary paraphenylenediamine is such that n is equal to 0.
- 4. (Currently Amended) The composition of claim [[2]] 1, wherein the cationic tertiary paraphenylenediamine is such that n is equal to 1-and R₁ is chosen from the group formed by a halogen atom; a C₁-C₆ aliphatic or alicyclic, saturated or unsaturated hydrocarbon based chain; one or more carbon atoms possibly being replaced with an oxygen, nitrogen, silicon or sulphur atom or with an SO₂ group, the radical R₁ not comprising a peroxide bond or diazo, nitro or nitroso radicals.
- 5. (Cancelled).
- 6. (Currently Amended) The composition of claim [[5]] $\underline{1}$, wherein the cationic tertiary paraphenylenediamine is such that R_1 is chosen from a methyl, hydroxymethyl, 2-hydroxyethyl, 1,2-dihydroxyethyl, methoxy, isopropyloxy or 2-hydroxyethoxy radical.
- 7. (Cancelled).
- 8. (Currently Amended) The composition of claim [[7]] 1, wherein the cationic tertiary paraphenylenediamine is such that R₂ corresponds to formula II in which x is equal to 0 and R₄, R₅ and R₆, separately, are preferably chosen from a C₁-C₆ alkyl radical, a C₁-C₄ monohydroxyalkyl radical, a C₂-C₄ polyhydroxyalkyl radical, a (C₁-C₆)alkoxy(C₁-C₄)alkyl radical, a C₁-C₆ amidoalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, or R₄ and R₅ together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R₆ being chosen in this case from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical;

- a C_1 - C_6 aminoalkyl radical, an aminoalkyl radical mono- or disubstituted with a $(C_1$ - C_6)alkyl, $(C_1$ - C_6)alkylcarbonyl, amido or $(C_1$ - C_6)alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical; a $(C_1$ - C_6)alkylsilane $(C_1$ - C_6)alkyl radical; a $(C_1$ - C_6)alkylcarboxy $(C_1$ - C_6)alkyl radical; a $(C_1$ - C_6)alkylcarbonyl $(C_1$ - C_6)alkyl radical.
- 9. (Currently Amended) The composition of claim [[7]] 1, wherein the cationic tertiary paraphenylenediamine is such that R₂ corresponds to formula II in which x is equal to 1 and R₇ is chosen from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical in which the amine is mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁- C_6)alkylcarboxy(C_1 - C_6)alkyl radical; a (C_1 - C_6)alkylcarbonyl(C_1 - C_6)alkyl radical; an N-(C_1 -C₆)alkylcarbamyl(C₁-C₆)alkyl radical; R₄ and R₅ together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R₆ being chosen in this case from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical in which the amine is mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri (C_1-C_6) alkylsilane (C_1-C_6) alkyl radical; a (C_1-C_6) alkylcarboxy C_6)alkyl radical; a (C_1-C_6) alkylcarbonyl (C_1-C_6) alkyl radical; an $N-(C_1-C_6)$ alkylcarbamyl (C_1-C_6) alkyl radical; a (C_1-C_6) C₆)alkyl radical.
- 10. (Currently Amended) The composition of claim [[7]] $\underline{1}$, wherein the cationic tertiary paraphenylenediamine is such that R_2 corresponds to formula II and is such that D is a single bond or an alkylene chain that may be substituted.

- 11-13. (Cancelled).
- 14. (Currently Amended) The composition of claim 1[[2]], wherein the cationic tertiary paraphenylenediamine is such that R_2 corresponds to formula III and is such that x is equal to 0 and D is a single bond or an alkylene chain that may be substituted.
- 15-16. (Cancelled).
- 17. (Currently Amended) The composition of claim 1[[5]], in which the cationic tertiary paraphenylenediamine is such that R₂ corresponds to formula IV and is such that x is equal to 0 and R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical, and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical or a C₁-C₆ carbamylalkyl radical.
- 18. (Currently Amended) The composition of claim 1[[5]], wherein the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula IV and is such that x is equal to 1 and R₁₃ is chosen from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical in which the amine is mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl

radical; R_{11} is chosen from a hydroxyl radical, a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a C_1 - C_6 alkoxy radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, an amido radical, a C_1 - C_6 alkylcarbonyl radical, an amino radical mono- or disubstituted with a (C_1 - C_6)alkyl, (C_1 - C_6)alkylcarbonyl, amido or (C_1 - C_6)-alkylsulphonyl radical; and R_{12} is chosen from a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, a (C_1 - C_6)alkoxy(C_1 - C_6)alkyl radical and a C_1 - C_6 carbamylalkyl radical.

- 19. (Currently Amended) The composition of claim 1[[5]], wherein the cationic tertiary paraphenylenediamine is such that R_{11} , R_{12} and R_{13} are alkyl radicals that may be substituted.
- 20. (Cancelled).
- 21. (Original) The composition of claim 1, wherein the cationic tertiary para-phenylenediamine is such that the radical R_2 is a guanidine radical of formula -X-C=NR₈-NR₉R₁₀, X represents an oxygen atom or a radical -NR₁₁, R₈, R₉, R₁₀ and R₁₁ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.
- 22. (Original) The composition of claim 1, wherein the cationic tertiary para-phenylenediamine is chosen from the group formed by:
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide;
 - N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;

- N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium chloride;
- 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl ammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanyl-propyl)ammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl](trrimethylammoniumhexyl)dimethylammonium dichloride
- [1-(4-Aminophenyl)pyrrolidin-3-yl]oxophosphorylcholine
- {2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-trimethylammonium chloride
- 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride
- 3-{3-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
- 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride
- 3-{3-[1-(5-Trimethylsilanylethyl-4-amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride

- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride;
- N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;
- N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl] guanidinium chloride;
- 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl](2-hydroxyethyl)-dimethylammonium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanylpropyl ammonium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl](trrimethyl-ammoniumhexyl)dimethylammonium dichloride
- $[1\hbox{-}(4\hbox{-}Amino\hbox{-}3\hbox{-}methyl phenyl) pyrrolidin-3\hbox{-}yl] oxophosphoryl choline$
- {2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride
- 1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methyl-pyrrolidinium chloride

- 3-{3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
- 1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride
- [1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
- 3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- 3-{3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
- [1-(5-Trimethylsilanylethyl-4-amino-3-trimethylsilanylethyl-phenyl)pyrrolidin-3-yl]trimethylammonium chloride
- 3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- 1'-(4-Aminophenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride;
- 1'-(4-Amino-3-methylphenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride;
- 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl- 3H-imidazol-1-ium chloride;
- 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3Himidazol-1-ium chloride;

- 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)- 3H-imidazol-1-ium chloride;
- 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethyl-silanylpropyl)-3H-imidazol-1-ium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride;

- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.
- 23. (Original) The composition of claim 1, wherein the cationic tertiary para-phenylenediamine is chosen from the group formed by:
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide;
 - N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;
 - N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium chloride;
 - 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl ammonium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanyl-propyl)ammonium chloride;
 - [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride;
 - [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride;

- N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;
- N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl] guanidinium chloride;
- 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl](2hydroxyethyl)dimethylammonium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanylpropylammonium chloride;
- 1'-(4-Aminophenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride;
- 1'-(4-Amino-3-methylphenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride;
- 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride;
- 3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride;
- 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride;
- 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethyl-silanylpropyl)-3H-imidazol-1-ium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride;

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[1-(4-Aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide;
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- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.
- 24. (Original) The composition of claim 1, wherein the cationic tertiary para-phenylenediamine is chosen from the group formed by:
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;

- [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide;
- N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;
- N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium chloride;
- 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl ammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanyl-propyl)ammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl](trimethylammoniumhexyl)dimethylammonium dichloride;
- 1'-(4-Aminophenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride
- 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)- 3H-imidazol-1-ium chloride;
- 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride;
- [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide;

- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.
- 25. (Original) The composition of claim 1, wherein the cationic tertiary para-phenylenediamine is chosen from the group formed by:
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;
 - 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;

[1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl ammonium chloride;

1'-(4-Aminophenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride.

26. (Original) The composition of claim 1, wherein the cationic tertiary para-phenylenediamine is chosen from:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride and [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl-ammonium chloride.

27. (Cancelled).

29-31. (Cancelled).

- 28. (Currently Amended) The composition of claim [[27]] 1, wherein the polyol is selected from pinacol (2,3-dimethyl-2,3-butanediol), 1,2,3-butanetriol, 2,3-butanediol and sorbitol.
- 32. (Currently Amended) The composition of claim [[31]] 1, wherein the polyol is selected from 3-methyl-1,3,5-pentanetriol, 1,2,4-butanetriol, 1,5-pentanediol, 2-methyl-1,3-propanediol, 1,3-butanediol, 3-methyl-1,5-pentanediol, neopentyl glycol (2,2-dimethyl-1,3-propanediol), isoprene glycol (3-methyl-1,3-butanediol) and hexylene glycol (2-methyl-2,4-pentanediol).
- 33. (Original) The composition of claim 32, wherein the polyol is selected from hexylene glycol, neopentyl glycol and 3-methyl-1,5-pentanediol.

- 34. (Currently Amended) The composition of claim 1, wherein the cationic tertiary paraphenylenediamine(s) containing a pyrrolidine nucleus represent(s) from 0.001% to 10% and preferably from 0.005% to 6% by weight relative to the total weight of the composition.
- 35. (Currently Amended) The composition of claim 1, wherein the polyol of formula V represent from 0.1% to 40% and preferably from 0.5% to 30% and more preferably still from 1% to 20%-by weight relative to the total weight of the composition.
- 36. (Original) The composition of claim 1, wherein the composition further comprises at least one cationic polymer.
- 37. (Original) The composition of claim 1, wherein the composition further comprises at least one thickening polymer.
- 38. (Original) The composition of claim 1, wherein the composition further comprises at least one surfactant chosen from the group formed by anionic surfactants, amphoteric or zwitterionic surfactants, nonionic surfactants and cationic surfactants.
- 39. (Original) The composition of claim 1, wherein the composition further comprises at least one additional oxidation base other than cationic tertiary para-phenylenediamines containing a pyrrolidine nucleus, chosen from para-phenylenediamines, bis(phenyl)alkylenediamines, para-aminophenols, ortho-aminophenols and heterocyclic bases, and the addition salts thereof.
- 40. (Currently Amended) The composition of claim 39, wherein the additional oxidation base(s) is (are) present in an amount ranging from 0.001% to 20% by weight and preferably from 0.005% to 6% by weight relative to the total weight of the composition.

- 41. (Original) The composition of claim 1, wherein the composition further comprises at least one coupler chosen from meta-phenylenediamines, meta-aminophenols, meta-diphenols, naphthalene-based couplers and heterocyclic couplers, and the addition salts thereof.
- 42. (Original) The composition of claim 41, wherein the coupler is chosen from 1,3-dihydroxybenzene, 1,3-dihydroxy-2-methylbenzene, 4-chloro-1,3-dihydroxybenzene, 2,4-diamino-1-(β-hydroxyethyloxy)benzene, 2-amino-4-(β-hydroxyethylamino)-1-methoxybenzene, 1,3-diamino-benzene, 1,3-bis(2,4-diaminophenoxy)propane, 3-ureidoaniline, 3-ureido-1-dimethylaminobenzene, sesamol, 1-β-hydroxyethylamino-3,4-methylenedioxybenzene, α-naphthol, 2-methyl-1-naphthol, 6-hydroxyindole, 4-hydroxyindole, 4-hydroxy-N-methylindole, 2-amino-3-hydroxypyridine, 6-hydroxybenzomorpholine, 3,5-diamino-2,6-dimethoxypyridine, 1-N-(β-hydroxyethyl)amino-3,4-methylenedioxybenzene and 2,6-bis(β-hydroxyethylamino)toluene, and the addition salts thereof.
- 43. (Currently Amended) The composition of claim 41, wherein the coupler(s) is (are) present in an amount of between 0.001% and 20% and preferably between 0.005% and 6% by weight relative to the total weight of the composition.
- 44. (Original) The composition of claim 1, wherein the composition further comprises at least one direct dye.
- 45. (Original) The composition of claim 1, wherein the composition further comprises at least one hydroxylated solvent such as ethanol, propylene glycol, glycerol and polyol monoethers.

- 46. (Currently Amended) The composition of claim 1, wherein the composition further comprises an oxidizing agent chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, persalts, peracids and oxydase enzymes; preferably it is hydrogen peroxide.
- 47. (Original) A process for the oxidation dyeing of keratin fibres, wherein a dye composition as defined in claim 1 is applied to the fibres in the presence of an oxidizing agent.
- 48. (Original) A multi-compartment device, in which a first compartment contains a dye composition as defined in claim 1, and a second compartment contains an oxidizing agent.
- 49. (New) A dye composition for dyeing keratin fibres, comprising, in a medium that is suitable for dyeing, at least one cationic tertiary para-phenylenediamine comprising a pyrrolidine nucleus that corresponds to formula (I):

$$R_3$$
 R_2
 R_1
 R_2
 R_1
 R_2
 R_1
 R_2
 R_1
 R_2
 R_1
 R_2
 R_2
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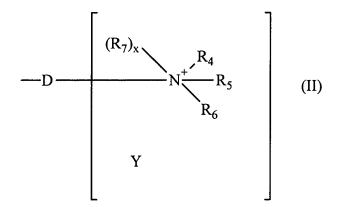
in which

n ranges from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals R_1 may be identical or different,

R₁ represents a chlorine, bromine, or C₁-C₄ alkyl, C₁-C₄ hydroxyalkyl, C₁-C₄ aminoalkyl, C₁-C₄ alkoxy or C₁-C₄ hydroxyalkoxy radical,

R₂ represents:

an onium radical Z corresponding to formula (II)



in which:

- D is a single bond or a linear or branched C₁-C₁₄ alkylene chain which may contain one or more hetero atoms chosen from oxygen, sulphur and nitrogen, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals, and which may bear one or more ketone functions;
- R₄, R₅ and R₆, taken separately, represent a C₁-C₁₅ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ amidoalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical in which the amine is mono- or disubstituted

with a C_1 - C_4 alkyl, $(C_1$ - $C_6)$ alkylcarbonyl, amido or $(C_1$ - $C_6)$ alkylsulphonyl radical; or

R₄, R₅ and R₆ together, in pairs, form, with the nitrogen atom to which they are attached, a saturated 4-, 5-, 6- or 7-membered carbon-based ring optionally containing one or more hetero atoms, the cationic ring possibly being substituted with a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a (C₁-C₆)alkylcarbonyl radical, a thio (-SH) radical, a C₁-C₆ thioalkyl (-R-SH) radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical;

R₇ represents a C₁-C₆ alkyl radical; a C₁-C₆

monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆

aminoalkyl radical; a C₁-C₆ aminoalkyl radical in which the amine is mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl

radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl
radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphinyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1,

when x = 0, then the linker arm is attached to the nitrogen atom bearing the radicals R_4 to R_6 , when x = 1, then two of the radicals R_4 to R_6 form, together with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated ring and D is linked to a carbon atom of the saturated ring;

Y is a counterion;

a trialkylammonium radical;

onium radical Z corresponding to formula (III)

(III)

in which

D is a single bond or a linear or branched C₁-C₁₄ alkylene chain that may contain one or more hetero atoms chosen from oxygen, sulphur and nitrogen, and that may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals, and that may bear one or more ketone functions;

the ring members E, G, J and L, which may be identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a pyrrole, pyrazole, imidazole, triazole, oxazole, isoxazole, thiazole or isothiazole ring,

q is an integer between 0 and 4 inclusive;
o is an integer between 0 and 3 inclusive;
q+o is an integer between 0 and 4;

the radicals R₈, which may be identical or different, represent a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a C₁-C₆ alkylcarbonyl radical, a thio radical, a C₁-C₆ thioalkyl radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical; it being understood that the radicals R₈ are borne by a carbon atom,

the radicals R₉, which may be identical or different, represent a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical, a (C₁-C₆)alkyl radical, a (C₁-C₆)alkyl radical or a benzyl radical; it being understood that the radicals R₉ are borne by a nitrogen atom,

R₁₀ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical in which the amine is substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphinyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphinyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1

when x = 0, the linker arm D is attached to the nitrogen atom,

when x = 1, the linker arm D is attached to one of the ring members E, G, J or L,

Y is a counterion,

wherein ring members E, G, J and L form an imidazole ring; or

an onium radical Z corresponding to formula (IV)

(IV)

in which:

D is a single bond or a linear or branched C₁-C₁₄ alkylene chain which may contain one or more hetero atoms chosen from an oxygen, sulphur or nitrogen atom, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals, and which may bear one or more ketone functions;

the ring members E, G, J, L and M, which may be identical or different, represent a carbon, oxygen, sulphur or nitrogen atom and form a ring chosen from pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;

p is an integer between 0 and 3 inclusive;

m is an integer between 0 and 5 inclusive;

p+m is an integer between 0 and 5;

the radicals R_{11} , which may be identical or different, represent a halogen atom, a hydroxyl radical, a C_1 - C_6

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alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a C₁-C₆ alkylcarbonyl radical, a thio radical, a C₁-C₆ thioalkyl radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical; it being understood that the radicals R₁₁ are borne by a carbon atom,

the radicals R₁₂, which may be identical or different,
represent a C₁-C₆ alkyl radical, a C₁-C₆
monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl
radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a
(C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical, a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl
radical or a benzyl radical; it being understood that the
radicals R₁₂ are borne by a nitrogen atom,

R₁₃ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical in which the amine is mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)-alkylsulphinyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical;

x is 0 or 1

when x = 0, the linker arm D is attached to the nitrogen atom,

when x = 1, the linker arm D is attached to one of the ring members E, G, J, L or M,

Y is a counterion,

wherein the ring members E, G, J, L and M form with the ring nitrogen a ring chosen from pyridine and pyrimidine rings;

R₃ represents a hydrogen atom or a hydroxyl radical; and

at least one polyol which has a molecular weight of between 90 and 350 and corresponds to the formula V:

$$R'_{1} \xrightarrow{\qquad \qquad C \qquad \qquad } \begin{bmatrix} A \end{bmatrix}_{m} \xrightarrow{\qquad \qquad C \qquad \qquad } R'_{4}$$

$$OH \qquad \qquad OH \qquad \qquad (V)$$

in which R'₁, R'₂, R'₃ and R'₄ denote independently of one another a hydrogen atom, a C₁-C₆ alkyl radical or a C₁-C₆ mono- or polyhydroxyalkyl radical,

A denotes a linear or branched alkylene radical containing from 1 to 18 carbon atoms, this radical containing 0 to 9 oxygen atoms, m denotes 0 or 1,

with the proviso that the total number of carbon atoms present in the radical A and in the entirety of substituents R'₁, R'₂, R'₃ and R'₄ is greater than or equal to 2;

wherein the polyol is further defined as: pinacol (2,3-dimethyl-2,3-butanediol), 1,2,3-butanetriol, 2,3-butanediol, sorbitol, a polyethylene glycol, 3-methyl-1,3,5-pentanetriol, 1,2,4-butanetriol, 1,5-pentanediol, 2-methyl-1,3-propanediol, 1,3-butanediol, 3-methyl-1,5-pentanediol, neopentyl glycol (2,2-dimethyl-1,3-propanediol), isoprene glycol (3-methyl-1,3-butanediol), or hexylene glycol (2-methyl-2,4-pentanediol.

- 50. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 0.
- 51. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 1.
- 52. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from a methyl, hydroxymethyl, 2-hydroxyethyl, 1,2-dihydroxyethyl, methoxy, isopropyloxy or 2-hydroxyethoxy radical.
- 53. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula II in which x is equal to 0 and R₄, R₅ and R₆, separately, are chosen from a C₁-C₆ alkyl radical, a C₁-C₄ monohydroxyalkyl radical, a C₂-C₄ polyhydroxyalkyl radical, a (C₁-C₆)alkoxy(C₁-C₄)alkyl radical, a C₁-C₆ amidoalkyl radical, a tri(C₁-C₆)-alkylsilane(C₁-C₆)alkyl radical, or R₄ and R₅ together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R₆ being chosen in this case from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, an aminoalkyl radical mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical.
- 54. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine is such that R_2 corresponds to formula II in which x is equal to 1 and R_7 is chosen from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyalkyl radical; a C_1 - C_6 aminoalkyl radical in which the amine is mono- or disubstituted with

a (C_1-C_6) alkyl, (C_1-C_6) alkylcarbonyl, amido or (C_1-C_6) alkylsulphonyl radical; a C_1-C_6 carbamylalkyl radical; a $tri(C_1-C_6)$ alkylsilane (C_1-C_6) alkyl radical; a (C_1-C_6) alkylcarboxy- (C_1-C_6) alkyl radical; a (C_1-C_6) alkylcarbonyl (C_1-C_6) alkyl radical; an N- (C_1-C_6) alkylcarbamyl (C_1-C_6) alkyl radical; R₄ and R₅ together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R₆ being chosen in this case from a C_1-C_6 alkyl radical; a C_1-C_6 monohydroxyalkyl radical; a C_2-C_6 polyhydroxyalkyl radical; a C_1-C_6 aminoalkyl radical in which the amine is mono- or disubstituted with a (C_1-C_6) alkyl, (C_1-C_6) alkylcarbonyl, amido or (C_1-C_6) alkylsulphonyl radical; a C_1-C_6 carbamylalkyl radical; a (C_1-C_6) alkylsilane (C_1-C_6) alkyl radical; a (C_1-C_6) alkylcarboxy (C_1-C_6) alkyl radical; a (C_1-C_6) alkyl radical.

- 55. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula II and D is a single bond or an alkylene chain that may be substituted.
- 56. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula III and x is equal to 0 and D is a single bond or an alkylene chain that may be substituted.
- 57. (New) The composition of claim 49, in which the cationic tertiary para-phenylenediamine is such that R_2 corresponds to formula IV and x is equal to 0 and R_{11} is chosen from a hydroxyl radical, a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a C_1 - C_6 alkoxy radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, an amido radical, a C_1 - C_6 alkylcarbonyl radical, an amino radical mono- or disubstituted with a (C_1 - C_6)alkyl, (C_1 - C_6)alkylcarbonyl, amido or (C_1 - C_6)alkylsulphonyl radical; a C_1 - C_6

monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical, and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical or a C₁-C₆ carbamylalkyl radical.

- 58. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula IV and x is equal to 1 and R₁₃ is chosen from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical in which the amine is mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkyl radical, a (C₁-C₆)alkyl radical, a (C₁-C₆)alkyl radical and a C₁-C₆ carbamylalkyl radical.
- 59. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine is such that R_{11} , R_{12} and R_{13} are alkyl radicals that may be substituted.
- 60. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine is such that the radical R_2 is a guanidine radical of formula -X-C=NR₈-NR₉R₁₀, X represents an

oxygen atom or a radical -NR₁₁, R₈, R₉, R₁₀ and R₁₁ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.

- 61. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine is chosen from the group formed by:
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide;
 - N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;
 - N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium chloride;
 - 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl ammonium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanyl-propyl)ammonium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl](trrimethylammoniumhexyl)dimethylammonium dichloride
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]oxophosphorylcholine
 - {2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-trimethylammonium chloride

- 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride
- 3-{3-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
- 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride
- 3-{3-[1-(5-Trimethylsilanylethyl-4-amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride;
- N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;
- N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl] guanidinium chloride;
- 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl](2-hydroxyethyl)-dimethylammonium chloride;

- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanylpropyl ammonium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl](trrimethyl-ammoniumhexyl)dimethylammonium dichloride
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]oxophosphorylcholine
- {2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride
- 1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methyl-pyrrolidinium chloride
- 3-{3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
- 1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1methylpiperidinium chloride
- [1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
- 3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- 3-{3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
- [1-(5-Trimethylsilanylethyl-4-amino-3-trimethylsilanylethyl-phenyl)pyrrolidin-3-yl]trimethylammonium chloride

- 3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanyl
 - ethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- 1'-(4-Aminophenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride;
- 1'-(4-Amino-3-methylphenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride;
- 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3Himidazol-1-ium chloride;
- 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3Himidazol-1-ium chloride;
- 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)- 3H-imidazol-1-ium chloride;
- 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethyl-silanylpropyl)-3H-imidazol-1-ium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide;

- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.
- 62. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine is chosen from the group formed by:
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide;
 - N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;
 - N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium chloride;
 - 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;

- [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl ammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanyl-propyl)ammonium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride;
- N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;
- N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl] guanidinium chloride;
- 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl](2hydroxyethyl)dimethylammonium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanylpropylammonium chloride;
- 1'-(4-Aminophenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride;
- 1'-(4-Amino-3-methylphenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride;

- 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3Himidazol-1-ium chloride;
- 3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride;
- 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride;
- 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethyl-silanylpropyl)-3H-imidazol-1-ium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide;

- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride:
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.
- 24. The composition of claim 1, wherein the cationic tertiary para-phenylenediamine is chosen from the group formed by:
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide;
 - N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;
 - N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium chloride;
 - 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl ammonium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanyl-propyl)ammonium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl](trimethylammoniumhexyl)dimethylammonium dichloride;

- 1'-(4-Aminophenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)- 3Himidazol-1-ium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride;

- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.
- 63. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine is chosen from the group formed by:
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;
 - 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl ammonium chloride;
 - 1'-(4-Aminophenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride.
- 64. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine is chosen from:
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride and [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl-ammonium chloride.
- 65. (New) The composition of claim 49, wherein the cationic tertiary para-phenylenediamine(s) containing a pyrrolidine nucleus represent(s) from 0.001% to 10% by weight relative to the total weight of the composition.
- 66. (New) The composition of claim 49, wherein the polyol of formula V represent from 0.1% to 40% by weight relative to the total weight of the composition.

- 67. (New) The composition of claim 49, wherein the composition further comprises at least one cationic polymer.
- 68. (New) The composition of claim 49, wherein the composition further comprises at least one thickening polymer.
- 69. (New) The composition of claim 49, wherein the composition further comprises at least one surfactant chosen from the group formed by anionic surfactants, amphoteric or zwitterionic surfactants, nonionic surfactants and cationic surfactants.
- 70. (New) The composition of claim 49, wherein the composition further comprises at least one additional oxidation base other than cationic tertiary para-phenylenediamines containing a pyrrolidine nucleus, chosen from para-phenylenediamines, bis(phenyl)alkylenediamines, para-aminophenols, ortho-aminophenols and heterocyclic bases, and the addition salts thereof.
- 71. (New) The composition of claim 70, wherein the additional oxidation base(s) is (are) present in an amount ranging from 0.001% to 20% by weight relative to the total weight of the composition.
- 72. (New) The composition of claim 49, wherein the composition further comprises at least one coupler chosen from meta-phenylenediamines, meta-aminophenols, meta-diphenols, naphthalene-based couplers and heterocyclic couplers, and the addition salts thereof.
- 73. (New) The composition of claim 72, wherein the coupler is chosen from 1,3-dihydroxybenzene, 1,3-dihydroxy-2-methylbenzene, 4-chloro-1,3-dihydroxybenzene, 2,4-diamino-1-(β-hydroxyethyloxy)benzene, 2-amino-4-(β-hydroxyethylamino)-1-methoxybenzene, 1,3-diamino-benzene, 1,3-bis(2,4-diaminophenoxy)propane, 3-ureidoaniline, 3-ureido-1-

dimethylaminobenzene, sesamol, 1-β-hydroxyethylamino-3,4-methylenedioxybenzene, α-naphthol, 2-methyl-1-naphthol, 6-hydroxyindole, 4-hydroxyindole, 4-hydroxy-N-methylindole, 2-amino-3-hydroxypyridine, 6-hydroxybenzomorpholine, 3,5-diamino-2,6-dimethoxypyridine, 1-N-(β-hydroxyethyl)amino-3,4-methylenedioxybenzene and 2,6-bis(β-hydroxyethylamino)toluene, and the addition salts thereof.

- 74. (New) The composition of claim 72, wherein the coupler(s) is (are) present in an amount of between 0.001% and 20% by weight relative to the total weight of the composition.
- 75. (New) The composition of claim 49, wherein the composition further comprises at least one direct dye.
- 76. (New) The composition of claim 49, wherein the composition further comprises at least one hydroxylated solvent such as ethanol, propylene glycol, glycerol and polyol monoethers.
- 77. (New) The composition of claim 49, wherein the composition further comprises an oxidizing agent chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, persalts, peracids and oxydase enzymes.
- 78. (New) A process for the oxidation dyeing of keratin fibres, wherein a dye composition as defined in claim 49 is applied to the fibres in the presence of an oxidizing agent.
- 79. (New) A multi-compartment device, in which a first compartment contains a dye composition as defined in claim 49, and a second compartment contains an oxidizing agent.

80. (New) A dye composition for dyeing keratin fibres, comprising, in a medium that is suitable for dyeing, at least one cationic tertiary para-phenylenediamine comprising a pyrrolidine nucleus that corresponds to formula (I):

$$R_3$$
 R_2
 R_1
 R_2
 R_1
 R_2
 R_1
 R_2
 R_1
 R_2
 R_1
 R_2
 R_3
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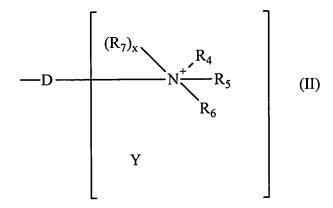
in which

n ranges from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals R₁ may be identical or different,

R₁ represents a chlorine, bromine, or C₁-C₄ alkyl, C₁-C₄ hydroxyalkyl, C₁-C₄ aminoalkyl, C₁-C₄ alkoxy or C₁-C₄ hydroxyalkoxy radical,

R₂ represents:

an onium radical Z corresponding to formula (II)



25611594.1

in which:

- D is a single bond or a linear or branched C₁-C₁₄ alkylene chain which may contain one or more hetero atoms chosen from oxygen, sulphur and nitrogen, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals, and which may bear one or more ketone functions;
- R₄, R₅ and R₆, taken separately, represent a C₁-C₁₅ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ amidoalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical in which the amine is mono- or disubstituted with a C₁-C₄ alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; or
- R₄, R₅ and R₆ together, in pairs, form, with the nitrogen atom to which they are attached, a saturated 4-, 5-, 6- or 7-membered carbon-based ring optionally containing one or more hetero atoms, the cationic ring possibly being substituted with a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy

radical, a $tri(C_1-C_6)$ alkylsilane(C_1-C_6)alkyl radical, an amido radical, a carboxyl radical, a (C_1 - C_6)alkylcarbonyl radical, a thio (-SH) radical, a C_1-C_6 thioalkyl (-R-SH) radical, a (C_1-C_6)alkylthio radical, an amino radical, an amino radical mono- or disubstituted with a (C_1-C_6)alkyl, (C_1-C_6)alkylcarbonyl, amido or (C_1-C_6)alkylsulphonyl radical;

R₇ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C2-C6 polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical in which the amine is mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C1-C6 carbamylalkyl radical; a C1-C6 trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁- C_6)alkylcarboxy(C_1 - C_6)alkyl radical; a (C_1 - C_6)alkylsulphinyl(C_1 - C_6)alkyl radical; a (C_1 - C_6)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C_1 - C_6)alkyl radical; an N-(C_1 - C_6)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C_1 - C_6)alkyl radical;

x is 0 or 1,

when x=0, then the linker arm is attached to the nitrogen atom bearing the radicals R_4 to R_6 , when x=1, then two of the radicals R_4 to R_6 form, together with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated ring and D is linked to a carbon atom of the saturated ring;

Y is a counterion;

a trialkylammonium radical;

onium radical Z corresponding to formula (III)

$$-D \xrightarrow{(R_{10})_x} N \xrightarrow{E} G (R_9)_0$$

(III)

in which

D is a single bond or a linear or branched C_1 - C_{14} alkylene chain that may contain one or more hetero atoms chosen from oxygen, sulphur and nitrogen, and that may be substituted with one or more hydroxyl, C_1 - C_6

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alkoxy or amino radicals, and that may bear one or more ketone functions;

the ring members E, G, J and L, which may be identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a pyrrole, pyrazole, imidazole, triazole, oxazole, isoxazole, thiazole or isothiazole ring,

q is an integer between 0 and 4 inclusive; o is an integer between 0 and 3 inclusive; q+o is an integer between 0 and 4;

the radicals R₈, which may be identical or different, represent a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a C₁-C₆ alkylcarbonyl radical, a thio radical, a C₁-C₆ thioalkyl radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆

polyhydroxyalkyl radical; it being understood that the radicals R_8 are borne by a carbon atom,

the radicals R₉, which may be identical or different, represent a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical, a (C₁-C₆)alkyl radical, a (C₁-C₆)alkyl radical or a benzyl radical; it being understood that the radicals R₉ are borne by a nitrogen atom,

R₁₀ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical in which the amine is substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylsulphinyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphinyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkylcarbonyl(

C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1

when x = 0, the linker arm D is attached to the nitrogen atom,

when x = 1, the linker arm D is attached to one of the ring members E, G, J or L,

Y is a counterion,

wherein ring members E, G, J and L form an imidazole ring; or

an onium radical Z corresponding to formula (IV)

(IV)

in which:

D is a single bond or a linear or branched C₁-C₁₄ alkylene chain which may contain one or more hetero atoms chosen from an oxygen, sulphur or nitrogen atom, and which may be substituted with one or more hydroxyl,

C₁-C₆ alkoxy or amino radicals, and which may bear one or more ketone functions;

the ring members E, G, J, L and M, which may be identical or different, represent a carbon, oxygen, sulphur or nitrogen atom and form a ring chosen from pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;

p is an integer between 0 and 3 inclusive;

m is an integer between 0 and 5 inclusive;

p+m is an integer between 0 and 5;

the radicals R₁₁, which may be identical or different,

represent a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a C₁-C₆ alkylcarbonyl radical, a thio radical, a C₁-C₆ thioalkyl radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical; it being understood that the radicals R₁₁ are borne by a carbon atom,

the radicals R₁₂, which may be identical or different,
represent a C₁-C₆ alkyl radical, a C₁-C₆
monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl
radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a
(C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical, a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl
radical or a benzyl radical; it being understood that the
radicals R₁₂ are borne by a nitrogen atom,

R₁₃ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical in which the amine is mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkyl radical; a (C₁-C₆)-alkylsulphinyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkyl-sulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkyl-carbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkyl-carbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkyl-

carbamyl(C_1 - C_6)alkyl radical; an N-(C_1 - C_6)alkyl-sulphonamido(C_1 - C_6)alkyl radical;

x is 0 or 1

when x = 0, the linker arm D is attached to the nitrogen atom,

when x = 1, the linker arm D is attached to one of the ring members E, G, J, L or M,

Y is a counterion,

wherein the ring members E, G, J, L and M form with the ring nitrogen a ring chosen from pyridine and pyrimidine rings;

 R_3 represents a hydrogen atom or a hydroxyl radical; and at least one polyol which has a molecular weight of between 90 and 350 and corresponds to the formula V:

$$R'_{1} \longrightarrow C \longrightarrow [A]_{m} \longrightarrow C \longrightarrow R'_{4}$$

$$OH \qquad OH \qquad (V)$$

in which R'₁, R'₂, R'₃ and R'₄ denote independently of one another a hydrogen atom, a C₁-C₆ alkyl radical or a C₁-C₆ mono- or polyhydroxyalkyl radical,

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- A denotes a linear or branched alkylene radical containing from 1 to 18 carbon atoms, this radical containing 0 to 9 oxygen atoms, m denotes 0 or 1,
- with the proviso that the total number of carbon atoms present in the radical A and in the entirety of substituents R'₁, R'₂, R'₃ and R'₄ is greater than or equal to 2;
- wherein the polyol is further defined as: pinacol (2,3-dimethyl-2,3-butanediol), 1,2,3-butanetriol, 2,3-butanediol, sorbitol, a polyethylene glycol, hexylene glycol, neopentyl glycol, or 3-methyl-1,5-pentanediol.
- 81. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 0.
- 82. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 1.
- 83. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from a methyl, hydroxymethyl, 2-hydroxyethyl, 1,2-dihydroxyethyl, methoxy, isopropyloxy or 2-hydroxyethoxy radical.
- 84. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine is such that R_2 corresponds to formula II in which x is equal to 0 and R_4 , R_5 and R_6 , separately, are chosen from a C_1 - C_6 alkyl radical, a C_1 - C_4 monohydroxyalkyl radical, a C_2 - C_4 polyhydroxyalkyl radical, a $(C_1$ - $C_6)$ alkoxy(C_1 - C_4)alkyl radical, a C_1 - C_6 amidoalkyl radical, a tri(C_1 - C_6)-

alkylsilane(C_1 - C_6)alkyl radical, or R_4 and R_5 together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R_6 being chosen in this case from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyalkyl radical; a C_1 - C_6 aminoalkyl radical, an aminoalkyl radical mono- or disubstituted with a (C_1 - C_6)alkyl, (C_1 - C_6)alkylcarbonyl, amido or (C_1 - C_6)alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical; a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical; a (C_1 - C_6)alkylcarboxy(C_1 - C_6)alkyl radical; a (C_1 - C_6)alkylcarbonyl(C_1 - C_6)alkyl radical; an N-(C_1 - C_6)alkylcarbamyl(C_1 - C_6)alkyl radical.

85. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula II in which x is equal to 1 and R₇ is chosen from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical; a tri(C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarboxy-(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; R₄ and R₅ together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R₆ being chosen in this case from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical in which the amine is mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkyl radical; a (C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarboxyl(C₁-C₆)alkyl radical.

- 86. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula II and D is a single bond or an alkylene chain that may be substituted.
- 87. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine is such that R_2 corresponds to formula III and x is equal to 0 and D is a single bond or an alkylene chain that may be substituted.
- 88. (New) The composition of claim 80, in which the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula IV and x is equal to 0 and R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical mono- or disubstituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical, and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical or a C₁-C₆ carbamylalkyl radical.
- 89. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine is such that R_2 corresponds to formula IV and x is equal to 1 and R_{13} is chosen from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyalkyl radical; a C_1 - C_6 aminoalkyl radical in which the amine is mono- or disubstituted with a (C_1 - C_6)alkyl, (C_1 - C_6)alkylcarbonyl, amido or (C_1 - C_6)alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical; a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical; a (C_1 - C_6)alkylcarbonyl(C_1 - C_6)alkyl radical;

an N-(C_1 - C_6)alkylcarbamyl(C_1 - C_6)alkyl radical; R_{11} is chosen from a hydroxyl radical, a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a C_1 - C_6 alkoxy radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, an amido radical, a C_1 - C_6 alkylcarbonyl radical, an amino radical mono- or disubstituted with a (C_1 - C_6)alkyl, (C_1 - C_6)alkylcarbonyl, amido or (C_1 - C_6)alkylsulphonyl radical; and R_{12} is chosen from a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, a (C_1 - C_6)alkoxy(C_1 - C_6)alkyl radical and a C_1 - C_6 carbamylalkyl radical.

- 90. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine is such that R_{11} , R_{12} and R_{13} are alkyl radicals that may be substituted.
- 91. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine is such that the radical R₂ is a guanidine radical of formula -X-C=NR₈-NR₉R₁₀, X represents an oxygen atom or a radical -NR₁₁, R₈, R₉, R₁₀ and R₁₁ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.
- 92. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine is chosen from the group formed by:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;

- [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide;
- N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;

- N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium chloride;
- 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl ammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanyl-propyl)ammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl](trrimethylammoniumhexyl)dimethylammonium dichloride
- [1-(4-Aminophenyl)pyrrolidin-3-yl]oxophosphorylcholine
- {2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-trimethylammonium chloride
- 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride
- 3-{3-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
- 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride
- 3-{3-[1-(5-Trimethylsilanylethyl-4-amino-3trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride

- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride;
- N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;
- N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl] guanidinium chloride;
- 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1ium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl](2-hydroxyethyl)-dimethylammonium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanylpropyl ammonium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl](trrimethyl-ammoniumhexyl)dimethylammonium dichloride
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]oxophosphorylcholine
- {2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride
- 1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methyl-pyrrolidinium chloride

- 3-{3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
- 1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride
- [1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
- 3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- 3-{3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3yloxy|propyl}-1-methyl-3H-imidazol-1-ium chloride
- [1-(5-Trimethylsilanylethyl-4-amino-3-trimethylsilanylethyl-phenyl)pyrrolidin-3-yl]trimethylammonium chloride
- 3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanyl-ethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
- 1'-(4-Aminophenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride;
- 1'-(4-Amino-3-methylphenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride;
- 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride;
- 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3Himidazol-1-ium chloride;

- 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)- 3H-imidazol-1-ium chloride;
- 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethyl-silanylpropyl)-3H-imidazol-1-ium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride;

- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.
- 93. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine is chosen from the group formed by:
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide;
 - N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;
 - N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium chloride;
 - 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl ammonium chloride;
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanyl-propyl)ammonium chloride;
 - [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride;
 - [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride;

- N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;
- N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl] guanidinium chloride;
- 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl](2hydroxyethyl)dimethylammonium chloride;
- [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanylpropylammonium chloride;
- 1'-(4-Aminophenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride;
- 1'-(4-Amino-3-methylphenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride;
- 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride;
- 3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride;
- 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride;
- 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethyl-silanylpropyl)-3H-imidazol-1-ium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride;

- [1-(4-Aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.
- 24. The composition of claim 1, wherein the cationic tertiary para-phenylenediamine is chosen from the group formed by:
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;

- [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide;
- N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride;
- N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium chloride;
- 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl ammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl(3-trimethylsilanyl-propyl)ammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl](trimethylammoniumhexyl)dimethylammonium dichloride;
- 1'-(4-Aminophenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride
- 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)- 3H-imidazol-1-ium chloride;
- 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride;
- $[1-(4-amin ophenyl) pyrrolidin-3-yl] ethyldimethylammonium\ chloride;$
- [1-(4-Aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide;

- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride;
- [1-(4-Aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.
- 94. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine is chosen from the group formed by:
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;
 - 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride;

- [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl ammonium chloride;
- 1'-(4-Aminophenyl)-1-methyl[1,3']bipyrrolidinyl-1-ium chloride.
- 95. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine is chosen from:
 - [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride and [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethyl-ammonium chloride.
- 96. (New) The composition of claim 80, wherein the cationic tertiary para-phenylenediamine(s) containing a pyrrolidine nucleus represent(s) from 0.001% to 10% by weight relative to the total weight of the composition.
- 97. (New) The composition of claim 80, wherein the polyol of formula V represent from 0.1% to 40% by weight relative to the total weight of the composition.
- 98. (New) The composition of claim 80, wherein the composition further comprises at least one cationic polymer.
- 99. (New) The composition of claim 80, wherein the composition further comprises at least one thickening polymer.
- 100. (New) The composition of claim 80, wherein the composition further comprises at least one surfactant chosen from the group formed by anionic surfactants, amphoteric or zwitterionic surfactants, nonionic surfactants and cationic surfactants.

- 101. (New) The composition of claim 80, wherein the composition further comprises at least one additional oxidation base other than cationic tertiary para-phenylenediamines containing a pyrrolidine nucleus, chosen from para-phenylenediamines, bis(phenyl)alkylenediamines, para-aminophenols, ortho-aminophenols and heterocyclic bases, and the addition salts thereof.
- 102. (New) The composition of claim 101, wherein the additional oxidation base(s) is (are) present in an amount ranging from 0.001% to 20% by weight relative to the total weight of the composition.
- 103. (New) The composition of claim 80, wherein the composition further comprises at least one coupler chosen from meta-phenylenediamines, meta-aminophenols, meta-diphenols, naphthalene-based couplers and heterocyclic couplers, and the addition salts thereof.
- 104. (New) The composition of claim 103, wherein the coupler is chosen from 1,3-dihydroxy-benzene, 1,3-dihydroxy-2-methylbenzene, 4-chloro-1,3-dihydroxybenzene, 2,4-diamino-1-(β-hydroxyethyloxy)benzene, 2-amino-4-(β-hydroxyethylamino)-1-methoxybenzene, 1,3-diamino-benzene, 1,3-bis(2,4-diaminophenoxy)propane, 3-ureidoaniline, 3-ureido-1-dimethylaminobenzene, sesamol, 1-β-hydroxyethylamino-3,4-methylenedioxybenzene, α-naphthol, 2-methyl-1-naphthol, 6-hydroxyindole, 4-hydroxyindole, 4-hydroxy-N-methylindole, 2-amino-3-hydroxypyridine, 6-hydroxybenzomorpholine, 3,5-diamino-2,6-dimethoxypyridine, 1-N-(β-hydroxyethyl)amino-3,4-methylenedioxybenzene and 2,6-bis(β-hydroxyethylamino)toluene, and the addition salts thereof.
- 105. (New) The composition of claim 103, wherein the coupler(s) is (are) present in an amount of between 0.001% and 20% by weight relative to the total weight of the composition.

- 106. (New) The composition of claim 80, wherein the composition further comprises at least one direct dye.
- 107. (New) The composition of claim 80, wherein the composition further comprises at least one hydroxylated solvent such as ethanol, propylene glycol, glycerol and polyol monoethers.
- 108. (New) The composition of claim 80, wherein the composition further comprises an oxidizing agent chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, persalts, peracids and oxydase enzymes.
- 109. (New) A process for the oxidation dyeing of keratin fibres, wherein a dye composition as defined in claim 80 is applied to the fibres in the presence of an oxidizing agent.
- 110. (New) A multi-compartment device, in which a first compartment contains a dye composition as defined in claim 80, and a second compartment contains an oxidizing agent.